

Q & A

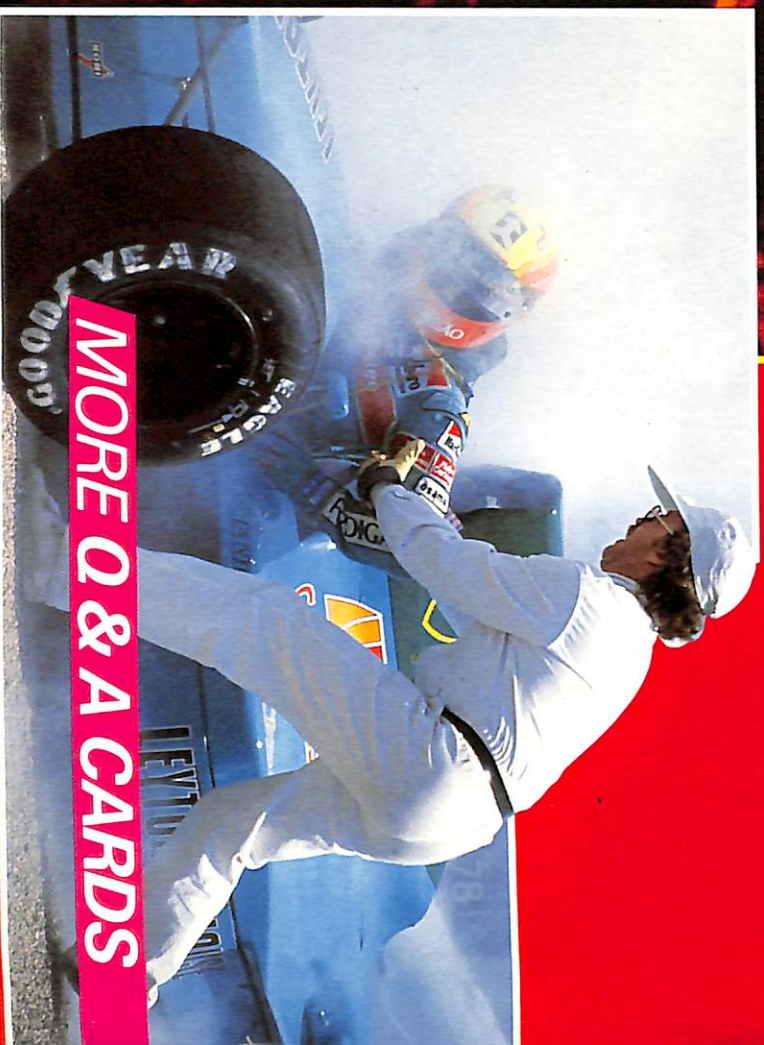
ADVENTURES IN THE WORLD OF SCIENCE

RESCUE

33

FACT FILES ON:

- ▶ Fighting fires
- ▶ The lunar 'lifeboat'
- ▶ Ejector seats
- ▶ War against poachers
- ▶ Rescue services
- ▶ Cleaning up oil spills



GIANT POSTER

SAVING THE TIGER

THREE PROJECTS

MORE Q & A CARDS

UK £1.99

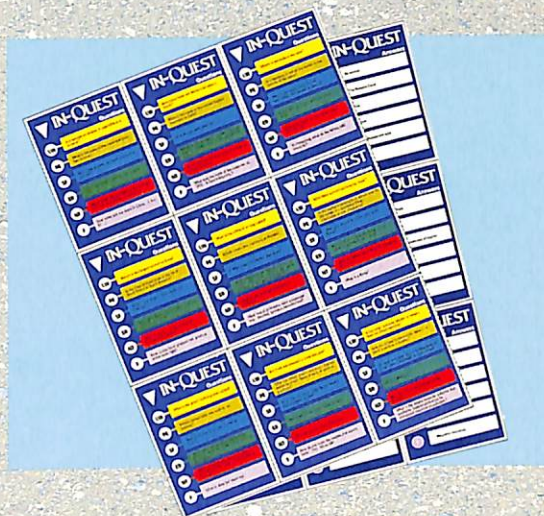
IRE£2.25 Aust \$4.95 NZ \$5.95 (inc. GST) Malaysia RM5.90 Sing \$5.95 Malta Lm1.75 S. Africa R8.95

FULLY
SOR

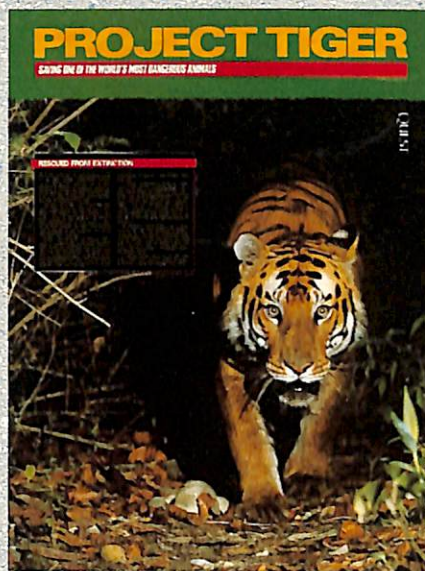
INSIDE THIS PACK

FACT FILES

- Emergency services ►
- Nuclear waste ► Putting
- out fires ► Inside an
- ambulance ► Wildlife in
- peril ► Rescue in Space
- Undersea escape



In-Quest
108 more questions
and answers



TIGER
POSTER



SCIENTIFIC PROJECTS

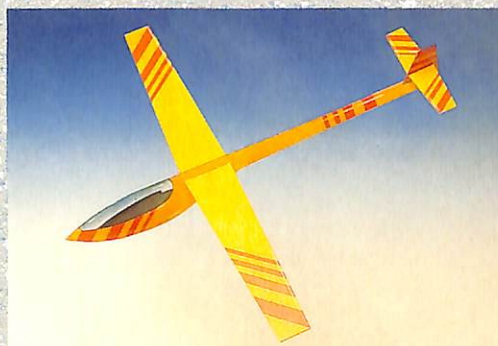
COMING IN QUEST 34 FLIGHT II

FACT FILES INCLUDE:

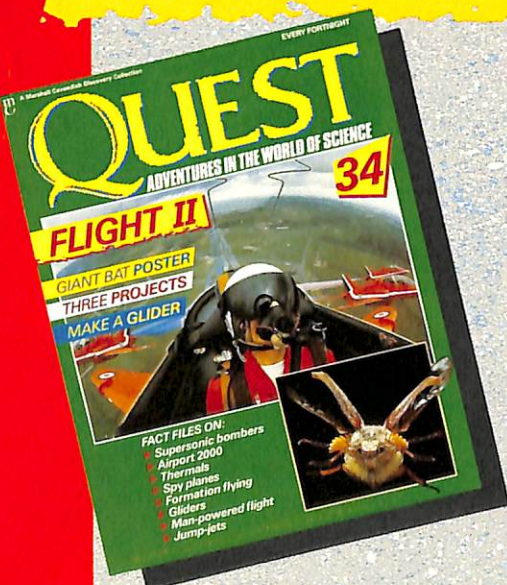
- Tilt-rotor aircraft
- Man-powered flight
- Air displays
- Aerial warfare
- Gliding machines
- Tomorrow's airport
- Stunt kites
- Currents and thermals



POSTER The bat



MODEL
Working
glider



DATAQUEST

LEISURE: THE MOST EXPENSIVE FILMS MADE

Film	Year	Production cost (US\$)
True Lies	1994	110,000,000
Terminator 2	1991	95,000,000
Batman Returns	1992	80,000,000
Rambo III	1988	58,000,000
Superman	1978	55,000,000
Superman II	1981	54,000,000
Who Framed Roger Rabbit?	1988	53,000,000
The Adventures of Baron Munchausen	1989	52,000,000
Ishtar	1987	45,000,000
Cleopatra	1963	44,000,000

AUTOMATION: LARGEST PRODUCERS OF CONSUMER DURABLES

Country	Item	Amount
Japan	Calculators	52,435,000
Japan	Pianos	360,000
USSR	Refrigerators	5,933,000
USSR	Socks	976,000,000
Japan	Typewriters	2,998,000

AUTOMATION: TOP FIVE CAR PRODUCERS

Country	Cars per year
USA	7,700,000
Japan	7,073,000
West Germany	3,788,000
France	2,910,000
USSR	1,300,000

RESCUE: NATIONAL MANNED SPACEFLIGHTS RESCUE: SPACE FATALITIES

Country	Days	No. of flights	Name	Country	Spacecraft	Date
USSR	1964	60	Roger Chaffee	USA	Apollo 1	27 January 1967
USA	479	55	Gus Grissom	USA	"	
France	15	2 (1 USSR, 1 USA)	Edward White	USA	"	
West Germany	10	2 (USA)	Vladimir Komarov	USSR	Soyuz 1	29 June 1967
Canada	8	1 (USA)	Georgi Dobrovolsky	USSR	Soyuz 11	24 April 1971
Czechoslovakia	8	1 (USSR)	Vladislav Volkov	USSR	"	
Poland	8	1 (USSR)	Viktor Patsayev	USSR	"	
India	8	1 (USSR)	Dick Scobee	USA	Space Shuttle	28 January 1986
East Germany	8	1 (USSR)	Mike Smith	USA	Challenger	
Hungary	8	1 (USSR)	Judith Resnick	USA	"	
Romania	8	1 (USSR)	Elison Onizuka	USA	"	
Cuba	8	1 (USSR)	Ronald McNair	USA	"	
Mongolia	8	1 (USSR)	Gregory Jarvis	USA	"	
Vietnam	8	1 (USSR)	Christa McAuliffe	USA	"	
Saudi Arabia	7	1 (USA)				
Holland	7	1 (USA)				
Mexico	7	1 (USA)				
Bulgaria	2	1 (USSR)				



PROJECTS

RESCUE

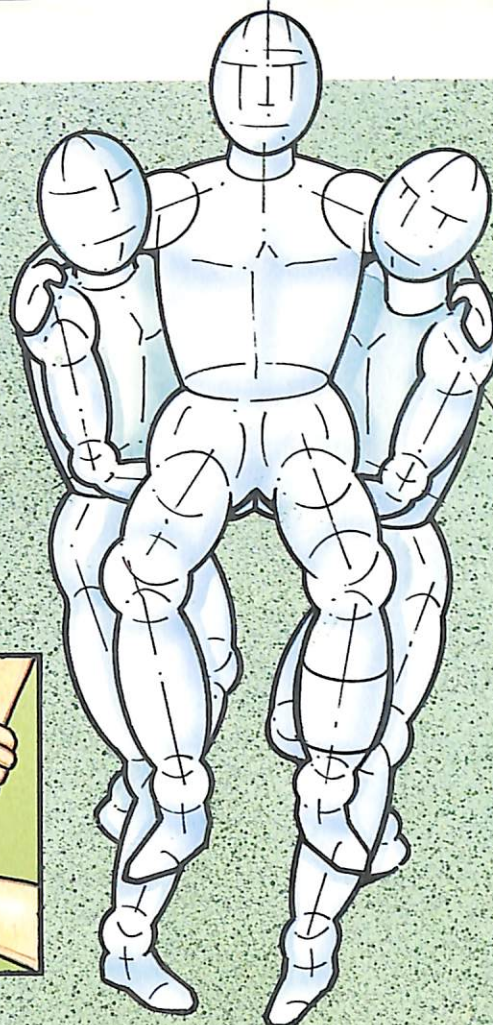
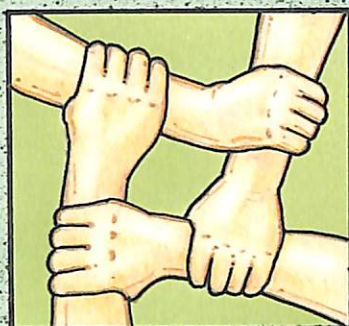
- How can you carry an injured person to safety?

A TWO-PERSON SEAT

1 2 3 4 5

Combined efforts can safely carry a slightly injured person.

You need two friends to help you practise this and you should not attempt to carry an injured person until you can do this competently. In any case, you should never attempt to move someone who is unconscious or badly hurt. First make a seat by gripping your left wrist with your right hand and your partner's right wrist with your left hand. Then lift the third person as shown.



John Houghton

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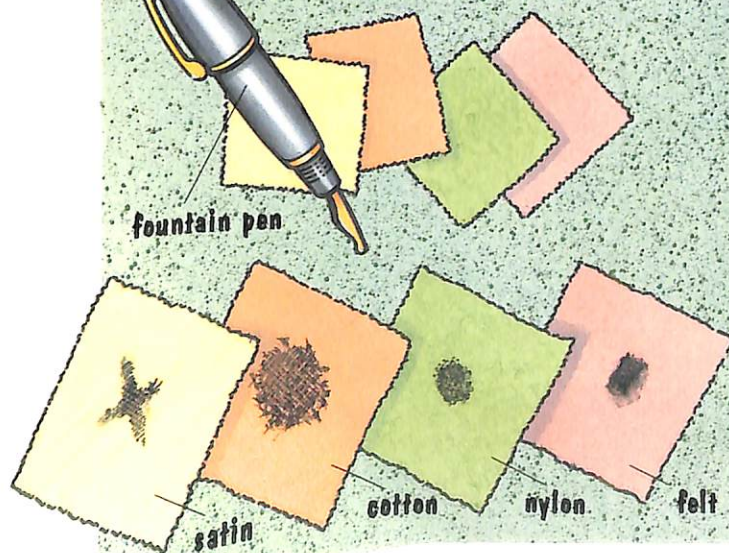
MATERIAL ABSORPTION

1 2 3 4 5

You need about four different pieces of fabric and a fountain pen. Make sure that each of the fabrics are a different thickness - say, satin, cotton, felt and brushed nylon. Touch the nib on each piece of fabric for ten seconds and see what happens. This experiment demonstrates the capillary action of ink on different textures of cloth.



fountain pen



satin

cotton

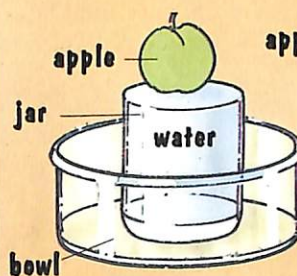
nylon

felt

ARCHIMEDES' PRINCIPLE

1 2 3 4 5

First weigh the bowl. Put the filled jar into the bowl, then place the apple slowly into the water. Weigh the apple, then weigh the spilled water in the bowl, subtracting the weight of the bowl. They should be equal.



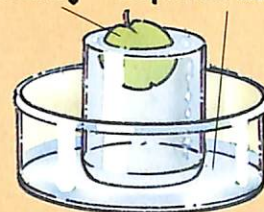
apple

jar

water

bowl

apple floating displaced water



PROJECT INFORMATION

1 2 3 4 5

Each **QUEST** project has its own difficulty rating: 1 very simple, 2 simple, 3 intermediate, 4 advanced, 5 complicated.

WARNING!

Every care has been taken to ensure projects are as safe as possible. However, parents should supervise all projects. The publisher can accept no liability for injury.



PROJECT TIGER

SAVING ONE OF THE WORLD'S MOST DANGEROUS ANIMALS

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QUEST

RESCUED FROM EXTINCTION

The saving of the tiger in India and Nepal is one of the great wildlife conservation success stories. Hunted by poachers for its skin, poisoned by farmers, its habitat threatened by industrialization, the Indian tiger faced extinction in the early 1970s. A population census revealed that only 1872 remained in the wild.

The response of the Indian government was rapid: a total hunting ban was imposed in 1972, and in 1973 Project Tiger was launched. This drive to save the Tiger received vital impetus from international conservation groups, including the World Wildlife Fund, who commenced to raise \$1,000,000 for vital equipment through its 'Operation Tiger' campaign.

Project Tiger set aside nine reserves with a range of habitats suited to tigers and provided extra rangers and equipment, such as jeeps and radios, for fighting poachers. The results were striking: the tiger population increased by 60 per cent between 1972 and 1979. There are now 15 reserves, covering a total area of 23,437 sq km,

and between five and six thousand Indian tigers living wild.

Of course, conserving a dangerous animal such as the tiger has its disadvantages – each year several deaths are caused by man-eaters. Project Tiger experts have attempted to educate those living near tiger areas on how to deal with tigers – most will only attack as a defensive reaction because they have been surprised or feel threatened. The few, usually sick or old, animals that turn man-eater naturally have to be destroyed.

The importance of rescuing a top predator such as the tiger from extinction is twofold: saving the tiger also means conserving its prey, such as blackbuck, axis and swamp deer and guar (wild oxen), and its habitat, which can range from dense jungle to swampland, grassland and mountains.

It is this ecosystem approach that has made Project Tiger such a success, setting the pattern for wildlife conservation schemes in the future.

McDougal Ardea London

With thanks to the World Wildlife Fund and the IUCN for assistance

